



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/634,833	08/04/2000	James A. McLeod	84333-202/ADB	2549

7590

02/27/2002

Adrian D Battison  
Ade & Company  
1700 360 Main Street  
Winnipeg, MB R3C 3Z3  
CANADA

EXAMINER

WEEKS, GLORIA R

ART UNIT

PAPER NUMBER

3721

DATE MAILED: 02/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/634,833

Applicant(s)

MCLEOD ET AL.

Examiner

Gloria R Weeks

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLeod (USPN 5,934,861) in view of Engle et al. (USPN 4,741,116).

In reference to claim 1 and its limitations as stated above, McLeod discloses an apparatus for collecting elongate pieces comprising; a frame (20) arranged for attachment to a vehicle for moving in a direction of working movement (13) across the ground between stacks on the ground of the elongate pieces to be collected; a picking assembly (column 4, lines 31-33) on the frame (20) for lifting the elongate pieces from the ground; a transport conveyor (16) on the frame (20) having a forward end (16a) for receiving the elongate pieces from the picking assembly and arranged to transport the elongate pieces rearwardly from the picking assembly; the picking assembly comprising a first and a second wall (24, 25) each on a respective first and second side of the forward conveyor (16) and extending generally forwardly there from for receiving the elongate pieces in front of the forward end (16a); at least the second of the side walls (25) being pivotal about a substantially upright axis at the second side of the forward end from a first collecting position extending forwardly and outwardly of the second side to a second confining position extending forwardly and inwardly of the second side, the second side wall (25) including a first portion which, in the first collecting position extends forwardly and outwardly (column 3, lines 50-60). McLeod does not disclose a second portion, which extends from a

Art Unit: 3721

forward end of the first portion generally forwardly, nor does he disclose the first portion forming an inclined blade which is inclined from its bottom edge upwardly and rearwardly. Engle et al. teaches a wall including a first portion (101) and a second portion (11) which extends from a forward end of the first portion generally forwardly, and wherein the first portion (101) forming an inclined blade (figure 1) which is inclined from its bottom edge upwardly and rearwardly (column 2, line 38). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the second wall of McLeod with the extension of Engle et al. for the purpose of providing an extension to the second wall that would project at an forward angle from the second wall, and to modify the second wall of McLeod to include the blade form of the first wall portion of Engle et al.

Regarding claim 2 and its limitations as stated above, McLeod discloses an apparatus for collecting elongate pieces wherein the first portion (25) is arranged such that the bottom edge thereof in the confining position projects to a position inwardly of the respective side of the transport conveyer (16) such that the pieces can be squeezed by the side walls (24, 25) when moved to the confining position to a width less than that of the transport conveyer (16) and can be released when moved out of the confining position to travel along the transport conveyer (16; column 3, lines 65-67; column 4, lines 1-7).

With respect to claim 3 and its limitations as state above, McLeod discloses an apparatus for collecting elongate pieces wherein the side walls (24, 25) are arranges such that in the confining position a forward end of the second side wall (25) is closely adjacent a forward end of the first side wall (24) so as squeeze the collected pieces, but not to fully enclose them.

However, with the modification of the second side wall in view of Engle et al., the second wall

Art Unit: 3721

would fully enclose the collected pieces against the first side wall. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the second wall of McLeod to include the extension of Engle et al. for the purpose of fully enclosing the collected pieces when the second wall is moved into the confining position.

In reference to claim 4 and its limitations as stated above, McLeod discloses an apparatus for collecting elongate pieces wherein the first side wall (24) includes a continuous belt (41) having an inwardly facing inner run which stands substantially vertically upwardly (figures 2-3) and moves horizontally along the first side wall (24), the belt (41) having a belt drive (47) operable for moving the inner run both forwardly and rearwardly for aligning the pieces generally along the conveyer (16; column 3, lines 39-50).

Regarding claim 5 and its limitations as stated above, McLeod discloses an apparatus for collecting elongate pieces wherein the first side wall (24) is fixed in position extending generally forwardly of the direction of movement (figures 2-3).

With respect to claim 6 and its limitations as stated above, McLeod discloses an apparatus for collecting elongate pieces wherein the picking assembly (column 4, lines 31-33) includes a spiked picking roller (36) rotatable about an axis across the forward end of the conveyer (16; figures 1-3; column 3, lines 15-29).

In reference to claim 7 and its limitations as stated above, McLeod discloses an apparatus for collecting elongate pieces wherein the picking assembly includes only one spiked picking roller. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include another spiked picking roller parallel to the disclosed spiked

Art Unit: 3721

roller, since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claim 8, McLeod discloses an apparatus for collecting elongate pieces comprising; a frame (20) arranged for attachment to a vehicle for moving in a direction of working movement (13) across the ground between stacks on the ground of the elongate pieces to be collected; a picking assembly (column 4, lines 31-33) on the frame (20) for lifting the elongate pieces from the ground; a transport conveyor (16) on the frame (20) having a forward end (16a) for receiving the elongate pieces from the picking assembly and arranged to transport the elongate pieces rearwardly from the picking assembly; the picking assembly comprising a first and a second wall (24, 25) each on a respective first and second side of the forward conveyor (16) and extending generally forwardly there from for receiving the elongate pieces in front of the forward end (16a); at least the second of the side walls (25) being pivotal about a substantially upright axis at the second side of the forward end from a first collecting position extending forwardly and outwardly of the second side to a second confining position extending forwardly and inwardly of the second side (column 3, lines 50-60), the side walls (24, 25) being arranged such that in the confining position, the second wall (25) is closely adjacent a forward end of the first side wall (24) so as to squeeze the collected pieces. McLeod does not disclose the second wall fully enclosing the collected pieces in the confining position, nor does he disclose the second wall including a bottom edge that projects inward. Engle et al. teaches a wall including a first portion (101) and a second portion (11) which extends from a forward end of the first portion generally forwardly (column 2, lines 43-45) and a bottom edge thereof that projects to a position inwardly (column 2, lines 37-38). It would have been obvious to one having

ordinary skill in the art at the time the invention was made to modify the second wall of McLeod to include the extension and bottom edge formation of Engle et al. for the purpose of fully enclosing the collected pieces when the second wall is moved into the confining position.

With respect to claim 9 and its limitations as stated above, McLeod discloses an apparatus for collecting elongate pieces wherein the first side wall (24) includes a continuous belt (41) having an inwardly facing inner run which stands substantially vertically upwardly (figures 2-3) and moves horizontally along the first side wall (24), the belt (41) having a belt drive (47) operable for moving the inner run both forwardly and rearwardly for aligning the pieces generally along the conveyor (16; column 3, lines 39-50).

In reference to claim 10 and its limitations as stated above, McLeod discloses an apparatus for collecting elongate pieces wherein the first side wall is fixed in position extending generally forwardly of the direction of movement (figure 2-3).

3. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLeod (USPN 5,934,861) and Engle et al. (USPN 4,741,116) as applied to claim 1, and further in view of Smith et al. (USPN 4,269,242), Black, Jr. (USPN 5,640,832) and Urban et al. (USPN 4,520,720).

Regarding claim 11 and its limitations as stated above, McLeod discloses an apparatus for collecting elongate pieces comprising a frame (20) arranged for attachment to a vehicle for moving in a direction (13) of working movement across the ground between stacks on the ground of the elongate pieces to be collected, but does not disclose a unscrambling and stacking assembly on the frame of the apparatus.

Smith et al. teaches including sub-stations or sub-assemblies on a frame for transportation with a vehicle across the ground such that the collected elongate pieces are discharged behind the vehicle in a bundle (column 2, lines 17-22, 29-34). Smith et al. also teaches an unscrambling and stacking assembly on the frame (column 4, lines 3-7). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the frame of the apparatus of McLeod by including the sub-assemblies of Smith et al. for the purpose or having one major frame for attachment to a vehicle.

Black, Jr. teaches a stacking assembly including a row former for receiving elongate pieces from a conveyer and aligning the pieces side by side in a row and including a transfer section for stacking rows on top of one another to form a stack of row. It would have also been obvious to further modify the apparatus of McLeod in view of Smith et al. with the stacking assembly of Black, Jr. for the purpose of forming rows of side by side elongated pieces, of which the rows are stacked on top of each other.

Urban et al. teaches a bundling assembly for wrapping a stack of rows with a bundling material. It would have been obvious to one having ordinary skill in the art to further modify the apparatus of McLeod in view of Smith et al. and Black, Jr. by including the bundling apparatus of Urban et al. for the purpose of wrapping the stacked rows with a bundling material.

With respect to claim 12 and its limitations as stated above, McLeod discloses an apparatus for collecting elongate pieces, including a picking assembly (column 4, lines 31-33) on the frame (20) for lifting the elongate pieces from the ground and a transport conveyer (16) on the frame (20) having a forward end (16a) for receiving the elongate pieces from the picking assembly and arranged to transport the elongate pieces rearwardly from the picking assembly.



McLeod does not disclose an unscrambling and stacking assembly. Smith et al. teaches an unscrambling (64) and stacking assembly located at the rearward end of a conveyer (62; column 4, lines 2-7). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of McLeod to include the unscrambling and stacking assembly of Smith et al. in the same formation as Smith et al. for the purpose of the conveying means being able to convey the elongated pieces to the unscrambling and stacking assemblies.

In reference to claim 13 and its limitations as stated above, the modified apparatus for collecting elongate pieces of McLeod in view of Smith et al. discloses stacking assembly mounted on the frame (column 2, lines 17-22, 29-34) so as to be positioned behind the vehicle (column 4, lines 3-7) and the conveyer (62; figure 1) extends along one side of the vehicle forwardly and to one side of the vehicle from the picking assembly. McLeod in view of Smith et al. does not disclose a bundling assembly. Urban et al. teaches a bundling assembly. Due to Scott et al.'s disclosure of the frame being able to accommodate sub-assemblies, it would have been obvious to one having ordinary skill in the art to further modify the frame of the apparatus of McLeod in view of Smith et al. to include the bundling apparatus of Urban et al. and position it adjacent the stacking assembly.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over McLeod (USPN 5,934,861), Engle et al. (USPN 4,741,116), Smith et al. (USPN 4,269,242), Black, Jr. (USPN 5,640,832) and Urban et al. (USPN 4,520,720) as applied to claim 13 above, and further in view of Rahman (USPN 5,794,416).

Regarding claim 14 and its limitations as stated above, the modified apparatus of McLeod in view of Smith et al. and Urban et al. does not disclose the specific set-up of the stacking assembly. Rahman teaches a stacking assembly that includes a conveyer (57, 58) to a bundling assembly (116), where in the bundling assembly (116) is arranged to discharge the bundle rearwardly (126; column 11, lines 11-35). It would have been obvious to one having ordinary skill in the art to further modify the apparatus of McLeod in view of Smith et al. and Urban et al. by including the stacking assembly set-up of Rahman for the purpose of having conveying means to the stacking assembly, conveying means from the stacking assembly to the bundling assembly, and conveying means from the bundling assembly away from the apparatus. In reference to the location of each sub-assembly on the frame, it would have been obvious to one having ordinary skill in the art to have the conveyor from the stacking assembly extend across the vehicle behind the vehicle from the conveyor on the one side to the bundling assembly on the other side and the bundle to be discharged rearwardly, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over McLeod (USPN 5,934,861), Engle et al. (USPN 4,741,116), Smith et al. (USPN 4,269,242), Black, Jr. (USPN 5,640,832) and Urban et al. (USPN 4,520,720 as applied to claim 11 above, and further in view of Hodsall (USPN 4,330,001).

With respect to claim 15 and its limitations, the modified apparatus of McLeod in view of Smith et al. and Black, Jr. discloses a stacking assembly (400) of Black, Jr. and the unscrambling hopper (64) of Smith et al. into which the pieces are deposited and an elevator (62) for lifting the pieces one at a time, the hopper having an end wall against which the pieces are fed, and two

Art Unit: 3721

side walls each on a respective side of the end wall with the side walls converging inwardly and downwardly to a bottom apex, and the elevator (62) being arranged up one side wall. Smith et al. does not disclose an elevator piece engaging members thereon for engaging and lifting one piece at a time for discharging the pieces. Hodsall teaches an elevator with engaging member thereon for engaging and lifting on piece at a time for discharging the pieces at the top of the elevator. It would have been obvious to one having ordinary skill to further modify the elevator of the apparatus of McLeod in view of Smith et al. for the purpose having engaging members to lift the pieces one at a time.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over McLeod (USPN 5,934,861), Engle et al. (USPN 4,741,116), Smith et al. (USPN 4,269,242), Black, Jr. (USPN 5,640,832), Urban et al. and Hodsall (USPN 4,330,001) as applied to claim 15 above, and further in view of Pruett (USPN 5,893,701).

In reference to claim 16 and its limitations as stated above, the modified apparatus of McLeod discloses a transfer conveyer, but does not disclose engaging end pieces attached to the conveyer. Pruett teaches a conveyer (85) with engaging pieces for the purpose of sliding products along the path of travel (column 10, lines 10-15). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the transfer conveyer of McLeod by including the engaging pieces of Pruett for the purpose of guiding the collected pieces into alignment on the transfer conveyer.

7. Claim 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLeod (USPN 5,934,861), Engle et al. (USPN 4,741,116), Smith et al. (USPN 4,269,242), Black, Jr.

Art Unit: 3721

(USPN 5,640,832) and Urban et al. (USPN 4,520,720) as applied to claim 11 above, and further in view of Mojden et al. (USPN 4,537,010).

Regarding claim 17 and its limitations as stated above, the modified apparatus of McLeod in view of Black, Jr. discloses a stacking assembly that includes a transfer conveyer (402) for forwarding the pieces side by side in a row, a transfer rack (420) for lifting a piece from the transfer conveyer and moving the piece horizontally from the transfer conveyer (402), and a stack support for receiving the moved piece deposited thereon. Mojden et al. teaches a stacking assembly that includes a transfer conveyer (112) for forwarding the pieces side by side in a row (figure 9), a transfer rack (62) for lifting a row of a predetermined number of the pieces from the transfer conveyer (112) and moving the row generally horizontally (column 13, lines 52-68) from the transfer conveyer (112), and a stack support for receiving the moved rows deposited thereon and for moving the received rows downwardly to receive a next row on top of a previous row (column 14, lines 1-9). It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the stacking assembly of McLeod in view of Black, Jr. by including the stacking conveying means of Mojden et al. for the purpose of transporting the rows of the pieces horizontally and vertically.

With respect to claim 18 and its limitations as stated above, the modified apparatus of McLeod in view of Mojden et al. discloses a transfer rack (62) which can be raised for engaging the pieces and can be moved horizontally from the transfer conveyer to the stack support for conveying the engaged pieces. Mojden et al. does not disclose a transfer rack comprising a pair of parallel horizontal forks. It would have been an obvious matter of design choice to have a transfer rack that is a fork shape, since applicant has not disclosed that the fork shape solves any

Art Unit: 3721

stated problem or is for any particular purpose and it appears that the invention would perform equally well with the transfer rack of Mojden et al.

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over McLeod (USPN 5,934,861), Engle et al. (USPN 4,741,116), Smith et al. (USPN 4,269,242), Black, Jr. (USPN 5,640,832), Urban et al. (USPN 4,520,720) and Mojden et al. (USPN 4,537,010) as applied to claim 17 above, and further in view of Kanaya et al. (USPN 5,944,479).

In reference to claim 19 and its limitations as stated above, the modified apparatus of McLeod in view of Mojden et al. discloses a stacking assembly wherein the stack support which can be lowered to deposit the stack onto a stack support, but the stack support isn't lowered onto a roller conveyer. Kanaya et al. teaches a stacking assembly wherein the stack support can be lowered onto a roller conveyer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the stacker assembly of McLeod in view of Mojden et al. for the purpose of lowering the stack onto a roller conveyer.

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over McLeod (USPN 5,934,861), Engle et al. (USPN 4,741,116), Smith et al. (USPN 4,269,242), Black, Jr. (USPN 5,640,832), and Urban et al. (USPN 4,520,720), as applied to claim 11 above, and further in view of Loehr (USPN 6,076,342).

Regarding claim 20 and its limitations as stated above, the modified apparatus for collecting elongate pieces of McLeod in view of Smith et al. wherein the stacking assembly and bundling assembly are mounted on a sub-frame portion of the frame, but does not disclose how they are mounted. Loehr teaches the use of pivotable mounts to connect a frame to a sub-frame for the purpose of the sub-frame being able to adjust to different ground elevations (column 1,

Art Unit: 3721

lines 7-23). It would have been obvious to one having ordinary skill in the art to further modify the frame of the apparatus of McLeod by including pivotable mounts between the main frame and the sub-frames for the purpose of the sub-frames being able to adjust to different ground elevations.

10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over McLeod (USPN 5,934,861), Engle et al. (USPN 4,741,116), Smith et al. (USPN 4,269,242), Black, Jr. (USPN 5,640,832), Urban et al. (USPN 4,520,720), and Johnson (USPN 4,818,172) as applied to claim 20 above, and further in view of Schultz (USPN 4,269,535).

With respect to claim 21 and its limitations as stated above, the modified apparatus for collecting elongate pieces of McLeod in view of Smith et al. wherein the frame is attached to a rear of the vehicle by a hitch and is supported relative to the ground on two wheels extending rearwardly from the frame. Schultz teaches the use of a four point hitch for the purpose of allowing the angle of the assembly attached to a vehicle be adjustable to accommodate changes in ground contour (column 1, lines 51-68). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the hitch of the picker assembly of McLeod with the four point hitch of Schultz for the purpose of the picker assembly being adjustable to changes in ground contour.

11. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLeod (USPN 5,934,861), Engle et al. (USPN 4,741,116), Smith et al. (USPN 4,269,242), Black, Jr. (USPN 5,640,832), and Urban et al. (USPN 4,520,720) as applied to claim 11 above, and further in view of Shill (USPN 5,944,477).

Regarding claim 22 and its limitations as stated above, the modified apparatus for collecting elongate pieces of McLeod in view of Black, Jr. and Urban et al. discloses a stacking assembly (400) including a row former (420) for receiving the elongate pieces for aligning the pieces side by side in a row and including a transfer section (424) for stacking rows on top of one another to form a stack of rows; and a bundling assembly (300) comprising: a conveyer (260) for forwarding the stack (column 19, lines 6-10); and a feed member for transporting the strapping material around the compressed stack. Black, Jr. does not disclose a rectangular surrounding frame structure for surrounding the stack. Urban et al. discloses a bundling assembly (10) comprising a conveyer (column 4, lines 60-68; column 5, lines 1-2), a rectangular surrounding frame structure (50; figure 1) enclosing the stack on the conveyer and including a bottom frame piece (42), a top frame piece (41) and two side frame pieces (43, 44; column 5, lines 18-44); and a feed member (150) for transporting the strapping material (14) around the stack in the frame (50) for clamping of ends of the strapping material (14) to form a loop, the feed member (150) comprising an endless loop member extending around the frame and drivable along its length around the frame with a coupling member (84) at one point on the loop member for receiving and transporting an end of the strapping material around the stack as the loop member passes around the frame (50; column 6, lines 55-66). Neither Urban et al. or Black, Jr. disclose compressing means within the rectangular frame of the bundling apparatus. Shill teaches compressing members for compressing a stack. It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the bundling apparatus of McLeod in view of Black, Jr. and Urban et al. by including the compressing means of Shill for the purpose of ensuring the stack is aligned and compact.

With respect to claim 23 and its limitations as stated above, the modified apparatus for collecting elongate pieces of McLeod in view of Shill discloses a bundling assembly wherein the frame includes a first clamping (40, 42) assembly movable into engagement with one side of the stack for compressing the stack side to side and a second clamping assembly movable into engagement with the top or bottom of the stack for compressing the stack bottom (column 3, lines 61-67; column 4, lines 1-25).

In reference to claim 24 and its limitations as stated above, the modified apparatus for collecting elongate pieces of McLeod in view of Urban et al. discloses a bundling assembly that forms a loop using guide member, but not a chain. It would have been an obvious matter of design choice to include a chain attached to the guide member, since applicant has not disclosed that the chain solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the strap dispensing reel and guide members of Urban et al.

Regarding claim 25 and its limitations as stated above, the modified apparatus for collecting elongate pieces of McLeod in view of Shill discloses a bundling assembly wherein the first clamping assembly comprises a first clamping bar (42, 44) mounted on one side frame member, and moveable relative thereto by a hydraulic drive between the clamping bar and the frame member and movable relative thereto by a hydraulic drive between the clamping bar and the frame member (column 3, lines 61-67; column 4, lines 1-25) and wherein the second clamping assembly comprises a second clamping bar (32) mounted on the top frame member (35; figure 1) and movable relative thereto by a hydraulic drive between the second clamping bar and the top frame member (column 3, lines 11-44).



***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to attachment for notice of references cited and recommended for consideration.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gloria R Weeks whose telephone number is (703) 605-4211. The examiner can normally be reached on 6:30 am - 5:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on (703) 305-2187. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7769 for regular communications and (703) 308-7769 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-1789.

Gloria R Weeks  
Examiner  
Art Unit 3721

grw  
February 21, 2002



**Rinaldi I. Rada  
Supervisory Patent Examiner  
Group 3700**